Chris C. Oynes, Regional Director Minerals Management Service Gulf of Mexico OCS Region (MS-5410) 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

Dear Mr. Oynes:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality's Regulations for Implementing NEPA, the Environmental Protection Agency (EPA) Region 6 Office in Dallas, Texas, completed its review of the Draft Environmental Impact Statement (DEIS) on the Proposed Gulf of Mexico OCS Oil and Gas Lease Sales: 2007-2012 for Central Planning Areas 205, 206, 208, 213, 216, and 222; and Western Planning Areas 204, 207, 210, 215 and 218 dated November 2006.

EPA has rated the DEIS as **LO**, **Lack of Objections**, with Requests for Clarification in the Final EIS. Additional clarification requested in the Final EIS includes: hypoxia research, National Estuarine Research Reserve, National Estuary Program, air and water quality impacts, cumulative impacts and mitigation measures. Our classification will appear in the *Federal Register* according to EPA's responsibility under Section 309 of the CAA, to inform the public of our views on proposed federal actions.

General and specific comments on the DEIS are enclosed which more clearly identify the areas to be clarified. If you have any questions, please contact Mike Jansky at (214) 665-7451 or e-mail him at jansky.michael@epa.gov for assistance. Please send our office five copies of the Final EIS when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20460.

Sincerely yours,

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Rhonda M. Smith, Chief Office of Planning and Coordination (6EN-XP)

Enclosure

GENERAL AND SPECIFIC COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE

MINERAL MANAGEMENT SERVICE OUTER CONTINENTAL SHELF OIL AND GAS WESTERN AND CENTRAL GULF OF MEXICO LEASE SALES AREAS (2007-2012)

COMMENTS

Planning Area Boundaries

Early early in 2006, MMS announced a new geographic boundary between the Central and Eastern Planning Areas that widened the former and reduced later. The new boundary is assumed in this Lease Sale EIS. Search of the MMS website revealed no information about this change in boundary. No explanation could be found in this document nor the possible ramifications related to the Coastal Management Program authorities of states, and the confusion introduced relative to EPA's NPDES permitting authority. It would be appropriate to address this administrative alteration fully in the Final EIS.

The boundaries of the three Gulf of Mexico planning areas include area seaward of the 200 mile distance which has been defined as the limit of the United States' Exclusive Economic Zone (EEZ). MMS proposes to delete that portion beyond the EEZ named "Eastern Gap" Does MMS plan to lease other area beyond the 200 mile EEZ boundary? Why isn't the EEZ boundary the boundary of the three planning areas? It would be helpful for the EEZ boundary to be shown on Figure 2-11, and for all figures to include a scale of distance.

Alternatives

Alternative C which is to delete from leasing the area within 15 miles of the Gulf Shores Alabama coastline, has been this community's preferred alternative. Previous lease sales deleted this offshore area, so it is unclear why Alternative C is not the preferred alternative at this time.

The FEIS should present an analysis of the amount of natural gas (and convertible hydrates) produced domestically from the Gulf to be able to displace the LNG quantity expected to be imported through Gulf ports. This is appropriate because such a comparison would be one measure of where the nation is relative to the National Energy Policy goal of increasing the domestic energy supply.

Spills

Well shut-in procedures mandated by MMS are discussed relative to approaching storms. It is not mentioned how the contents of undersea pipelines are to be managed when severe storms approach.

Security is a topic on the minds of most Americans, and disruptions to oil and gas production cause economic concerns. Offshore facilities, because they are easily accessible by any size vessel, could make them vulnerable to terrorism. The FEIS should address the capabilities for deterring terrorist actions and detail the response effort if one should occur. The document indicates that many offshore facilities are remotely controlled so there should be some description of the ability of offshore operators to detect spills and unauthorized persons and vessels at facilities.

The document should address the type of vessels and manpower needed at a given site in the Gulf to clean up a spill of crude or other toxic materials. At one time, a rapid response team was positioned at Mobile (Theodore), Alabama. Given the large distances to many new OCS operating leases, generally describe how and where responses would occur.

It is stated in the 5-Year Lease Program document (Page IV-353) that no major spills, attributable to shut-in wells, occurred from OCS facilities during the 2005 hurricanes. Table 4-33 of this Lease Sale EIS shows there were spills from other aspects of OCS facilities caused by Hurricane Rita. It is interesting that no major spills from OCS facilities occurred during Hurricane Katrina, according to Table 4-33. There is no information in the document on whether these spill events reached Gulf beaches and affected tourism. The FEIS should address possible "lessens-learned" from the 2005 hurricanes that are addressable by MMS.

Water Quality and Hydrology

EPA is pleased to note discussion of recent MMS field studies of before and after drilling and development. Water quality within deep water regions of the Gulf is addressed on pages III-3 and III-4. Pollutant concentrations data is unclear as some values are in percentages and others in conventional units. No data on the "after operations" samples are provided. Most data are for sediment and not water in the water quality section. Satellite remote sensing of oil slicks is mentioned but there is no mention of any field sampling for verification or otherwise. EPA is very interested in results of further studies with the before operations and after operations format.

Surprisingly high water current velocities have been documented in the Gulf of Mexico, and in particular in the new distant, deep water areas. With surface water velocities of 150-200 cm/sec or higher and associated vertical current shear, these conditions present difficulties to operators that increase environmental and safety concerns. This physical oceanography data was presented in the MMS 5-Year Program EIS and defined as a great concern to offshore operators. It is interesting to note that

MMS has established a requirement for offshore facilities in deep water to monitor water current velocities. Please address in the FEIS how permits for activities subject to high water velocity could potentially be conditioned to minimize accidents and impacts to marine resources. More communication with interested parties should occur prior to activity in these areas, and it should include whether setbacks from high value habitats provide adequate protection. Displacement of offshore facilities substantial distances by hurricane conditions would indicate that ocean currents could intensify physical stress to structures.

Mitigation

There is no substantive consideration of mitigation for application to impactcausing activities. With recent experience of damage from hurricanes, there should be some consideration of mitigation Gulf-wide. The document mentions follow-up studies on the effects but there is little analysis on ways to reduce the damage occurrence.

There was much damage to pipeline infrastructure as a result of the 2005 hurricanes. MMS should evaluate additional measures in the construction protocols that may help to reduce damage to pipelines.

Cumulative Impacts

Discussion of cumulative impacts includes the major factor of existing and proposed LNG terminals and vaporization facilities. On page 4-62, the DEIS states that the open-loop vaporization process is expected to be used almost exclusively. Recent decisions by applicants would indicate that other offshore LNG processing facilities have decided or are contemplating the more environmentally sound closed-loop process including Compass Port. MMS is correct with its statements on the potential effects to marine plankton of open-loop vaporization, and these concerns are shared by EPA.

The Cumulative analysis is addressed on page 4-291 of the DEIS. Noting the MMS projection that an additional 32-47 new pipeline landfalls may occur, and numerous miles of new pipeline constructed, it is unclear how much product is expected to be moved by tankering particularly with the newest production field being far offshore.

A major concern to EPA involves potential spills from accidental pipeline damage caused during large coastal barrier island restoration projects and harbor expansions now being considered by the Corps of Engineers along the Gulf Coast. All of the hurricane restoration activities underway and proposed should be included in the cumulative impacts section. Coordination between MMS and the Corps is recommended for minimizing present and future pipeline damage.

Figure 3-3 displays the extent and frequency of hypoxia conditions west of the Mississippi River Delta. There also has been documentation by water quality monitoring/studies of severe hypoxia within large areas east of the Delta that should also be displayed in the FEIS.

Other Comments

Volume I

Page 1-11, <u>Harmful Algal Bloom and Hypoxia Research and Control Act</u>, 5th sentence: This paraphrased statement regarding the "coastal goal" of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force's January 2001 Action Plan should be properly cited as: "By the year 2015, subject to the availability of additional resources, reduce the 5-year running average areal extent of the Gulf of Mexico hypoxic zone to less than 5,000 square kilometers through implementation of specific, practical, and cost effective voluntary actions by all States, Tribes, and all categories of sources and removals within the Mississippi/Atchafalaya River Basin to reduce the annual discharge of nitrogen into the Gulf."

Page 1-17, <u>National Estuarine Research Reserve (NERR)</u>, last paragraph, first sentence: The Mission-Aransas Reserve is no longer proposed. It was formally accepted into the NERR system and the dedication ceremony was held in May, 2006.

Page 1-17, National Estuary Program: The third sentence is somewhat misleading but could be re-written as: "The governor of a state may nominate an estuary for inclusion in the EPA National Estuary Program. Once accepted, a Comprehensive Conservation and Management Plan (CCMP) is to be developed." In the next sentence, a correction should be made to note that programs have been afforded from 3-5 years to develop the CCMP. The last sentence should be corrected to note that there are a total of 28 National Estuary Programs.

Page 2-5, Mitigating Measures: This section could be revised to cite the current guidance on compensatory mitigation, which may be found in two documents: 1) 1990 Memorandum of Agreement between the Department of the Army and the U.S. Environmental Protection Agency, "Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines;" and 2) 2002 Mitigation Regulatory Guidance Letter (RGL)02-2, "Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899."

Page 2-6, <u>Existing Mitigating Measures</u>: This discussion is vague and conclusory. Specific mitigation measures that MMS applies to OCS operations, as well as any reasonable enhancements, should be disclosed in the FEIS so that the public and decision makers can fully understand existing operations and potential mitigation measures.

Page 3-108, Non-OCS-Related Marine Transport and page 4-300, Vessel Traffic and Navigation Channels: These sections, and perhaps other sections analyzing cumulative impacts, should factor in the increasing marine traffic (including tugs, supply and crew boats as well as LNG carriers) associated with new terminals both onshore and in the Gulf of Mexico for importing liquefied natural gas.

Page 4-27, <u>Air Emissions</u>, paragraph 2: While the text implies the data from the 2000 emissions inventory is analyzed, the Table 4-8 in Volume II references a 1994 MMS document.

Page 4-27, Air Emissions, paragraph 2: Although this Draft EIS is well organized and thorough in many aspects of environmental impact, the general conformity provisions of the Clean Air Act are not addressed. Section 176(c) of the Clean Air Act prohibits Federal entities from taking actions in non-attainment or maintenance areas that do not conform to the State Implementation Plan; see 58 FR 63214. Based on the information provided in the Draft EIS, it is possible that actions permitted by the MMS could impact certain onshore non-attainment or near-non-attainment areas, even though the "significance level" identified in 30 CFR 250 subpart C may not necessarily be triggered. In addition, the significant thresholds do not include emission levels for volatile organic compounds that play a large role in ozone formation in the Gulf Coast states. For that reason, EPA recommends that at a minimum, MMS perform a general conformity applicability analysis and incorporate this information into the Final EIS. With respect to this applicability analysis, EPA encourages MMS to closely coordinate with the Texas Commission on Environmental Quality, particularly as to impacts in the Houston/Galveston/Brazoria or Beaumont/Port Arthur airsheds in Texas. EPA further suggests adding a short description of the conformity process to the FEIS, including applicable de minimis levels of ozone precursors (NOx and VOC), and the outcome of the process for both construction and operation of the facilities and associated vessel traffic.

Page 4-78, <u>Proposed Action Analysis</u>, paragraph 2 and Page 4-147, opening paragraph: A discussion of the modeling runs including the offshore concentrations should be given as well.

Page 4-141, <u>Alternative D – No Action</u>: The analysis appears to be based on a Department of Interior report *Energy Alternatives and the Environment* (2001). The response of markets to taking no action (i.e., not going forward with leasing) is based on a high/low price for a barrel of crude from \$32 to \$18. That range is less than half the price per barrel reflected in the 2005 – 2006 open markets. Consumers have reacted by curtailing consumption and seeking alternative sources as crude prices advanced above \$60 a barrel. To provide accurate information about the effects of the no-action alternative, the analysis should be based on realistic assumptions about oil prices.

Page 4-292, <u>Impacts on Air Quality</u>, paragraph 5: The report should contain a summary of the results of the cumulative air quality modeling analysis that was performed in 1992 since it is used as an indicator of current impacts on air quality.

Page 4-292, <u>Impacts on Air Quality</u>, paragraph 5: The report should provide a contingency scenario if the modeling study currently underway regarding the Breton Class I area results in demonstrating an effect on the area.

Page 4-293, Impacts on Air Quality, paragraph 8: There should be a discussion of the

modeling results that indicated the 24-hour SO₂ and annual NO₂ PSD increments were exceeded at the Breton Class I area. The FEIS should address the efforts that will be made to eliminate the estimated exceedences.

Page 4-294, <u>Impacts on Air Quality</u>, paragraph 3: The report states that the modeling used to reach the conclusions about ozone levels not exceeding Federal air quality standards do not consider background air quality data from onshore. Background information should be discussed further to ensure that the addition of the new emissions will not contribute to further degradation of onshore non-attainment areas or result in new non-attainment areas.

Page 4-294, <u>Impacts on Air Quality</u>, paragraph 3: A discussion of the current inventory of OCS sources should be included in the document in comparison to new facilities expected to start up operations under the new lease sales.

Volume II

Page 110, Table 4-10: The ConocoPhillips Beacon Port Deepwater Port Act license application was withdrawn on November 3, 2006, and the corresponding Clean Air Act and Clean Water Act permit applications were withdrawn on December 7, 2006.

Page 110, Table 4-10: ChevronTexaco's Port Pelican offshore LNG terminal received its Deepwater Port Act license from the Maritime Administration on November 14, 2003.

Pages 116 and 123, Tables 4-17 and 4-25: The tables should provide a description of what emissions listed are subject to Clean Air Act requirements (non-mobile versus mobile sources) and the reasons why the amount of emissions by source vary so widely.

Pages 116 and 123, Tables 4-17 and 4-25: The NO₂ emissions listed in the tables for each source indicate that the sources will be defined as majors as identified by the Prevention of Significant Deterioration (PSD) program (greater than 250 tpy). A discussion should be included on how these facilities will meet PSD requirements including what types of Best Available Control Technology (BACT) will be required on these facilities.

Page 139, Table 4-41: The table should identify which proposed emissions are OCS and non-OCS. For comparison purposes, the report should discuss the current emission inventory of OCS sources.